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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,252	04/19/2004	Hyun-Sang Chung	3430-0201P	9427
2292	7590	12/14/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			DUONG, TAI V	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/826,252

Applicant(s)

CHUNG ET AL.

Examiner

Tai Duong

Art Unit

2871

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-9 and 14-20 is/are rejected.  
7) ☒ Claim(s) 10-13 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 08/12/04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recited feature “the seal pattern having a same thickness as the patterned seal” of claim 15 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does *not* disclose a method of manufacturing a liquid crystal display comprising the steps of forming a plurality of patterned spacers in the display region and a patterned seal in the seal pattern region by forming a first insulating material on the color filter layer and patterning the first insulating material through a photolithographic process, and forming a seal pattern outside the patterned seal, *the seal pattern having a same thickness as the patterned seal*. It is noted that the specification and the drawings *do* describe a method of manufacturing a liquid crystal display comprising the steps of forming a plurality of patterned spacers in the display region and a patterned seal in the seal pattern region by forming a first insulating material on the color filter layer and patterning the first insulating material through a photolithographic process, and forming a seal pattern outside the patterned seal, *the seal pattern having a thickness greater than that of the patterned seal*.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishikawa et al (US 6,414,733).

Note Fig. 5 which identically discloses the claimed liquid crystal display device comprising a black matrix (12a, 12b) over an inner surface of the second substrate; a color filter layer (13R, 13 R') over the black matrix in the display region and the seal pattern region; a plurality of patterned spacers 18 over the color filter layer in the display region; a patterned seal 14 over the color filter layer in the seal pattern region; a seal pattern 4 surrounding the patterned seal in the seal pattern region; a liquid crystal layer 5 disposed inside the patterned seal; wherein the patterned seal is formed of a same material as the patterned spacers; wherein the patterned seal is formed through a same process as the patterned spacers; wherein the patterned spacers and the patterned seal have a same thickness; and a common electrode 16 between the patterned spacers and the color filter layer and between the patterned seal and the color filter layer (col. 14, lines 51-67; col. 15, line 23 – col. 16, line 59). As to claim 9, see Fig. 7 and column 18, lines 29-36.

Claims 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 10 is allowed over the prior art of record because none of the prior art discloses or suggests a LCD device having the combination of the structure as recited in claim 1 and the recited feature "*wherein the color filter layer and the patterned seal have first and second holes which correspond to each other, wherein the seal pattern is formed in the first and second holes*". Claims 11-13 are also allowed since they depend on claim 10.

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Claims 15-20 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, first paragraph, set forth in this Office action.

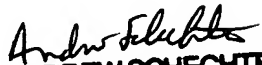
Claim 15 is allowed over the prior art of record because none of the prior art discloses or suggests a method of manufacturing a liquid crystal display having the combination of the step of "forming a plurality of patterned spacers in the display region and a patterned seal in the seal pattern region by forming a first insulating material on the color filter layer and patterning the first insulating material through a photolithographic process" and the step of "forming a seal pattern outside the patterned seal, *the seal pattern having a same thickness as the patterned seal*". Claims 16-20 are also allowed since they depend on claim 15.

Any inquiry concerning this communication should be directed to Tai Duong at telephone number (571) 272-2291.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

TD  
TVD

12/05

  
ANDREW SCHECHTER  
PRIMARY EXAMINER